

Allowance

1. Claims 1-73, 76, 77, 79, 81, 84, 85, 87, 89, 92, 93, 95, 97, 100, 101, 103, 105 and 106-109 are cancelled.
2. Claims 74, 75, 78, 80, 82, 83, 86, 88, 90, 91, 94, 96, 98, 99, 102, 104 and 110-113 are allowed.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
4. Authorization for this examiner's amendment was given in a telephone interview with Thomas Frame (Reg. #47,232) on 02 June 2009.
5. The application has been amended as follows:

In the Claims: Claims 74, 78, 82, 86, 90, 94, 98, 102 and 106-109.

Claim 74 (Currently Amended) A method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;

determining if the first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;

determining if data responsive to the first network management data request is contained in a cache of prefetched network management data if the first network management data request matches a pattern defined in the memory;

sending a response including the data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache and if the first network management data request matches a pattern defined in the memory; and

collecting, if the first network management data request matches a pattern defined in the memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request[[.]] ; and

if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache, initiating periodic data collections for data responsive to network management data requests in the pattern.

Claim 78 (Previously Presented) The method of claim ~~106~~ 74, wherein the initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in the pattern.

Claim 82 (Currently Amended) An apparatus for predictively responding to a network management data request, the apparatus comprising:

a storage memory adapted to define and store in advance at least one pattern of request, the pattern of request including one or more expected network management data requests;

a cache memory adapted to store prefetched network management data;

a request classifier configured to determine if a first network management data request matches a pattern defined in the storage memory and further configured to determine if data responsive to the first network management data request is contained in the cache memory if the first network management data request matches a pattern defined in the memory;

a sender coupled to the request classifier configured to send a response including the data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache memory and if the network management data request matches a pattern defined in the storage memory; **and**

a lookahead processor coupled to the request classifier configured to collect, if the first network management data request matches a pattern defined in the storage

memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request[[.]] ; and

wherein the lookahead processor is further configured to initiate periodic data collections for data responsive to the network management data requests in the pattern, if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache.

Claim 86 (Previously Presented) The apparatus of claim 407 82, wherein the lookahead processor is further configured to initiate periodic data collections at a rate matching a periodicity of the network management data requests contained in the pattern.

Claim 90 (Currently Amended) An apparatus for predictively responding to network management data requests, the apparatus comprising:

a storage memory adapted to define and store in advance a pattern of request, the pattern including one or more expected network management data requests;
a cache memory adapted to store prefetched network management data;

means for determining if a first network management data request contains a pattern defined in the storage memory;

means for determining if data responsive to the first network management data request is contained in the cache memory if the first network management data request contains a pattern defined in the storage memory;

means for sending a response including data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache memory and if the network management data request matches a pattern defined in the storage memory; and

means for collecting, if the first network management data request matches a pattern defined in the storage memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request[[.]] ; and

means for initiating periodic data collections for data responsive to network management data requests in the pattern, if the first network management data request matches a pattern defined in the storage memory, but data responsive to the first network management data request is not contained in the cache memory.

Claim 94 (Previously Presented) The apparatus of claim ~~108~~ 90, wherein the means for initiating includes means for initiating periodic data collections at a rate matching the periodicity of network management data requests contained in the pattern.

Claim 98 (Currently Amended) A program storage device, readable by a machine, embodying a program of instructions executable by the machine to perform a method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;
determining if the first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;
determining if data responsive to the first network management data request is contained in a cache of prefetched network management data if the first network management data request matches a pattern defined in the memory;
sending a response including the data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache and if the first network management data request matches a pattern defined in the memory; **and**
collecting, if the first network management data request matches a pattern defined in the memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the

network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request[[.]] ; and

if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache, initiating periodic data collections for data responsive to network management data requests in the pattern.

Claim 102 (Previously Presented) The program storage device of claim 109 98, wherein the initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in the pattern.

Claims 106-109 (Cancelled)

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance: Claims 74, 75, 78, 80, 82, 83, 86, 88, 90, 91, 94, 96, 98, 99, 102, 104 and 110-113 are allowable over the prior art of record.

The examiner has found that the prior art of record does not teach, suggest, or render obvious the specific combination of a method, an apparatus, or a program storage device for predictively responding to a network management data request, the method comprising:

receiving a first network management data request, determining if the first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests, if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache, initiating periodic data collections for data responsive to network management data requests in the pattern (major difference in the claims not found in the prior art) as set forth in the specification and recited in independent claims 74, 82, 90 and 98.

7. For these reasons, in conjunction with the other limitations of the independent claims, put this case in condition for allowance.
8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance OR Examiner’s Amendment.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
June 12, 2009

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2446